

ZABEZHENSAYA, P. I.

USSR/Chemistry - Grignard Reaction  
Chemistry - Halides

Mar 1948

"Grignard Reaction with Aliphatic and Alicyclic Tertiary Halides," A. F. Plate,  
P. I. Zabezhenskaya, Inst Org Chem, Acad Sci USSR, Moscow State U imeni  
M. V. Lomonosov, 4 pp

"Dok Akad Nauk SSSR, Nova Ser" Vol LIX, No 8

States that one of the methods used for obtaining hydrocarbons with quaternary  
atom of carbon is the reaction between tertiary alkyl magnesium halide and chlorine  
or bromine allyl, and describes use of this reaction for the synthesis of certain  
cyclopentane homologs. Submitted by Academician B. A. Kazanskiy, 26 Dec 1947

PA47T16

10

ca ZABEZHENSKAYA, P.I.

Synthesis of 2-ethylbicyclo[2.2.2]octane and 2-propylbicyclo[2.2.2]octane. R. A. Kazanskii and P. I. Zabuzhenskaya. Doklady Akad. Nauk SSSR, 72, 67 (1950).  
1-*butylenediamine*, *b.p.* 20.5-20.0°,  $\eta_2^0$  0.4435,  $d_2^{20}$  0.8400 (in  
a 3° beaker in a sealed tube with 2 g. acetylaldehyde at 100°  
gave 30.8%; 2,3-*endohydride*, 1,2,3,6-tetrahydro-*decahydroazulene*,  
*b.p.* 84.8°,  $\eta_2^0$  1.4035,  $d_2^{20}$  1.0310 (decompn., m. 170°  
2°). This treated with  $\text{MgMgI}$  in *very* dil.  $\text{Et}_2\text{O}$  solution  
gave 73% methyl (2,3-*endohydride*, 1,2,3,6-tetrahydro-*decahydroazulene*).

carbined (I), *b.p.* 102-10°, *b.p.* 101-2°,  $\eta_2^0$  1.3029,  $d_2^{20}$  0.8889;  
treatment with  $\text{H}_2$  over Raney Ni at room temp. gave the  
*sohd. alk.*, *b.p.* 103-4°, *b.p.* 108-9°,  $\eta_2^0$  1.4032,  $d_2^{20}$  0.9923,  
which on oxidation with  $\text{CrO}_3$  in  $\text{AcOEt}$  at 70° gave the  
corresponding *Et* ketone,  $\text{C}_9\text{H}_{16}$ , *b.p.* 90-100°,  
 $\eta_2^0$  1.4882,  $d_2^{20}$  0.8873 (temperaturer, m. 100-7°). This  
(12 g.), 10 ml.  $\text{EtOH}$ , and 5 g.  $\text{NaBH}_4$ , refluxed 3.5  
hrs., cooled, and heated with 3 g. *sohd. KOH* and some  
 $\text{Pt-C}$  gave 2-ethylbicyclo[2.2.2]octane, *b.p.* 168-9°,  $\eta_2^0$   
1.4729,  $d_2^{20}$  0.8813.  $\text{EtMgBr}$  in the above synthesis gave  
the *Et* homolog of I, 78%, *b.p.* 99-100°, *b.p.* 107-8°,  $\eta_2^0$  1.5035,  
 $d_2^{20}$  1.0012, hydrogenated over Raney Ni to the *sohd. alk.*,  
*b.p.* 118°,  $\eta_2^0$  1.4973,  $d_2^{20}$  0.9902, which yielded the corre-  
sponding *Et* ketone, *b.p.* 98-0°,  $d_2^{20}$  0.8888,  $\eta_2^0$  1.4884  
(temperaturer, m. 188-8-9° (decompn.)); the ketone  
treated as above gave 53% 2-propylbicyclo[2.2.2]octane,  
*b.p.* 175.5-8.5°,  $\eta_2^0$  1.4742,  $d_2^{20}$  0.8813. (I. M. Kosolapoff)

ZABEZHENSKAYA, P. I.

*Card, Chem. Sci.*

"Synthesis and Catalytic Conversion of Hydrocarbons of the  
Dicyclo (2,2,2) Octane Series." Sub 11 May 51, Moscow Order of  
Lenin State U imeni M. V. Lomonosov.

Dissertations presented for science and engineering degrees  
in Moscow during 1951.

SO: Sum. No. 480, 9 May 55

ACC NR: A17003094

SOURCE CODE: UR/0237/66/000/001/0043/0047

AUTHOR: Skvortsov, G. Ye.; Panov, V. A.; Zabozhinskiy, A. D.; Dolinskij, I. M.

ORG: none

TITLE: Micro-hardness meter with remote control model PMT-4SOURCE: Optiko-mekhanicheskaya promyshlennost', no. 7, 1966, 43-47TOPIC TAGS: hardness, laboratory instrument

ABSTRACT: A description of a device with remote control for measurement of micro-hardness of sections subjected to gamma rays. In the device, the loading of the indentor and all operations necessary for production of imprints with the diamond pyramid into the materials being tested are performed automatically with high accuracy. In addition to the authors, Engineers G. S. Zakharov, Ye. S. Kuleshova, B. I. Tikhomirov took part in the building of the PMT-4 device. Orig. art. has: 2 figures. [JPRS: 38,228]

SUB CODE: 14 / SUBM DATE: 22Mar65 / ORIG REF: 002

UDC: 539.533

Card 1/1

0725 3045

ZABEZHANSKIY, I.I., inzh.; CHERNOBROVOV, N.V., inzh.

Experience in the operation of an automatic voltage regulation  
system. Elek. sta. 34 no.9:23-25 S '63. (MIRA 16:10)

ZABEZHINSKIY, M.M.

Mathematical processing of measuring results. Izv.vys.ucheb.zav.;fiz.  
no.2:3-6 '63.

(MIRA 16:5)

1. Novosibirskiy elektrotekhnicheskiy institut svyazi.  
(Errors, Theory of)

ZABEZHINSKII, M.M.

Standard specimens of surface finish. Army VNIIM no.2:18-24  
(MIRE 12:1)

147.

(Metals Finishing)

S/044/62/000/C04/083/C99  
C111/C222

AUTHOR: Zabzhinskiy, M. M.

TITLE: On the application of the theory of probability to estimate the exactness of measurements

PERIODICAL: Referativnyy zhurnal, Matematika, no. 4, 1962, 17, abstract 4V105. ("Tr. Novosib. s.-kh. in-ta," 1959, 20, no. 3, 20-25)

TEXT: Let  $X$  be the exact value of a quantity, let  $M$  be the arithmetic mean of  $N$  measurements of this quantity and let  $S^2$  be the electrical dispersion  $S = \frac{S^2}{N}$ . Then  $z = \frac{M - X}{S}$  has a Student

distribution with  $N-1$  degrees of freedom, and this distribution converges for  $N \rightarrow \infty$  to the normal distribution. Therefore, in the case of small  $N$ , the use of the normal distribution (according to the author this often happens in laboratories) leads to exaggerated estimates of the measuring exactness. This statement is supported by an example and with tables. The author suggests that when stating the final results of measurements,

Card 1/2

On the application of the theory ...

S/044/62/000/004/083/099  
C111/C222

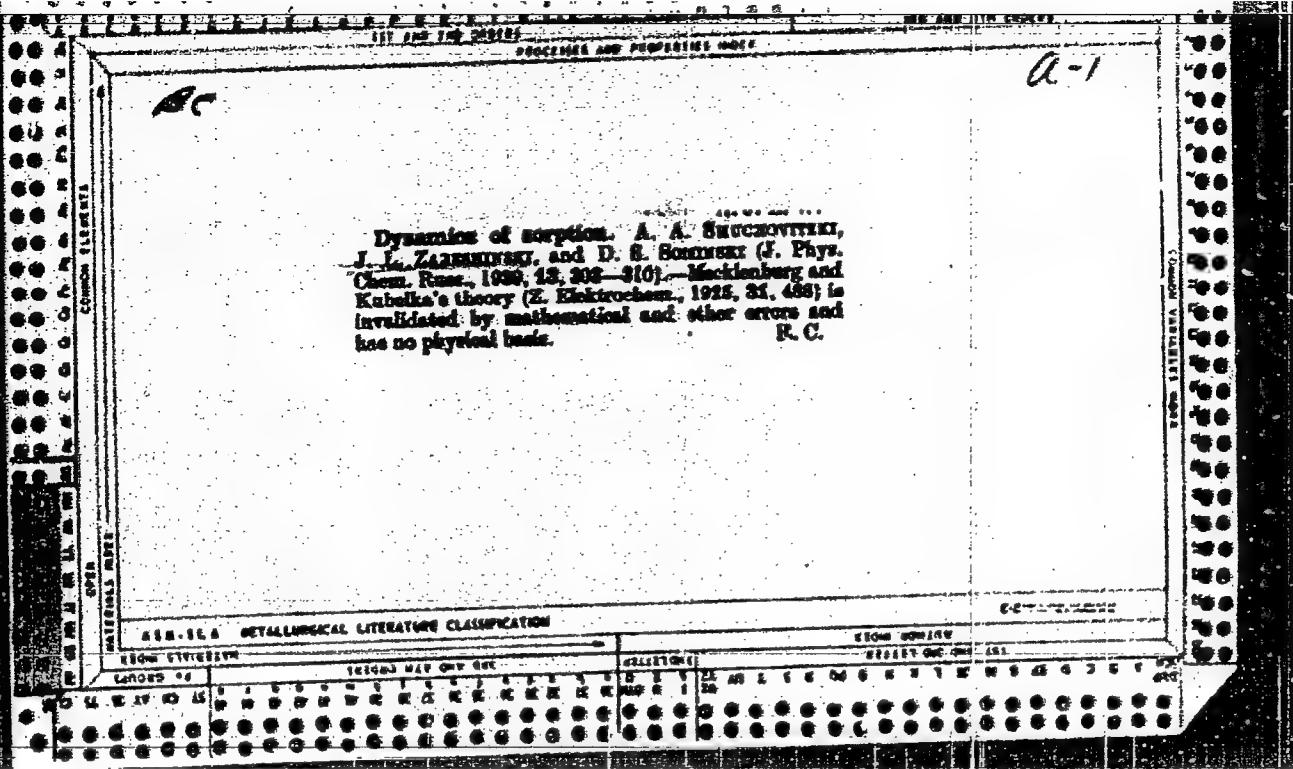
not only the arithmetic mean and the error estimate, but also  $N$  and  $\alpha$ .  
should be given. This would make it possible to compare the observations  
of different observers. ✓

[Abstracter's note: Complete translation.]

Card 2/2

ZABEZHINSKIY, V.I., inzh.; ALEKSANDROV, M.A., inzh.

Calculation of the mechanical strength of cantilever  
beams under the action of distributed loads. Vest.mash.  
42 no.3:51-54 Mr '62. (MIRA 15:3)  
(Beams and girders)

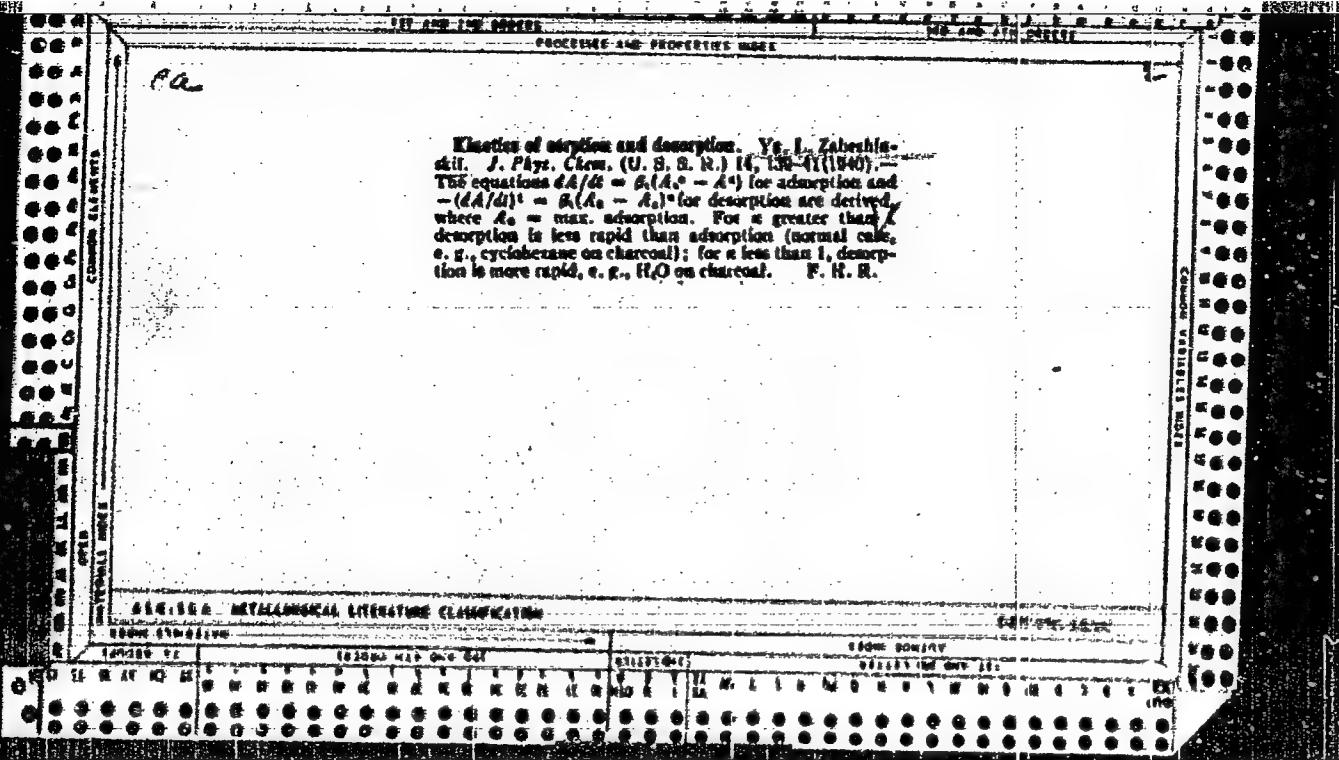


Measurement of velocity of moving electrons. Ye. L. Zabotin. *J. Phys. Chem. (U. S. S. R.)* 18, 1889-97 (1934). - Exptl. data are given showing that the equation  $\mu_p = \frac{L_p}{E_p}$  holds for charcoal with  $\alpha = 1$  for high gas velocities and with  $\alpha = 2$  for low gas velocities.

P. H. RAJENDRAN

APPROVED FOR RELEASE: 03/15/2001

**CIA-RDP86-00513R001963320002-5"**



**Kinetics of sorption by charcoal.** J. Zabitski (J. Phys. Chem. Russ., 1942, 17, 22-44). A cylinder,  $10^3$  cm<sup>3</sup> of cylinders, of activated charcoal C is kept in streaming air containing  $\text{EtOH}$ , and the rate  $da/dt$  of wt. increase is determined; then pure air is passed through, and the rate  $-da/dt$  of desorption is measured. It is found that  $da/dt = \beta(c_e - c)$  and  $-da/dt = \beta_e c$ ,  $c$  being  $[\text{EtOH}]$  in air,  $c_e$  and  $c$ , the  $[\text{EtOH}]$  which would have been in equilibrium with the adsorbed amount  $a$  and  $a_e$ , respectively. If the relation between  $a$  and  $c$  (i.e., the adsorption isotherm) is known, the sorption and desorption rates can be calc. The agreement with experiment is satisfactory, and the const.  $\beta$  is identical for sorption and desorption. It is also independent of  $[\text{EtOH}]$  between 3 and 9 mg. c.c. per sq. cm. per min., and  $\beta$  the diameter of the cylinder (0.16-0.2 cm.). Vals. of  $\beta$  for birch charcoal and for fruit-stone charcoal differ from that for charcoal C by only 20-40%. These results agree with the theory that  $\beta$  depends mainly on the external diffusion. Sorption isotherms are determined also for  $\text{H}_2\text{O}$ ,  $\text{MeOH}$ ,  $\text{PrOH}$ , and  $\text{Pr}_2\text{OH}$ .  $\text{H}_2\text{O}$  is the only substance the desorption of which is more rapid than the sorption. J. B.

J. J. S.

CA

2

Occulsion of gas from an air current by a bed of grains.  
I. A. A. Zhukovskii, Ya. L. Zabotinskii, and A. N.  
Tikhonov. (Karpov Inst., Moscow). J. Phys. Chem.  
(U.S.S.R.) 19, 202-01 (1945).—The rate  $v$  of adsorption  
by a powder of a gas which diff. with air is dried, by the  
diffusion of gas toward the grains. The diffusion within  
the grains takes place in the adsorption layer. The diffusion within  
the grains is proportional to  $e - y$ ,  $e$  being the av. gas  
concen. in the given layer of the adsorbent bed and  $y$  the  
concen. in equil. with the amt. adsorbed at a given moment.

If the effect of the longitudinal division (i.e., from one to  
another layer) on  $e$  is neglected and  $y$  is calc'd. according to  
Henry's law, an equation for  $v$  can be derived. If the serv-  
ice time of a bed is known for definite bed length, grain  
size, gas concn., and speed of air flow, this equation per-  
mits calcg. the service time for another set of conditions.  
J. J. Ullmann

E.C. 1.8 METALLURGICAL LITERATURE CLASSIFICATION

COLUMBIA UNIVERSITY LIBRARIES  
SERIALS RECEIVED

BC

Absorption of gas from an air current by granular material. L. A. Schuchortnik, J. Katsenelenbach, and A. Tikhonov (Acta Physicochim. U.R.S.S., 1946, 12, 144-157). An equation for the absorption of gas from an air current passing through a granular absorbent is derived from the case of physical adsorption on the assumption that the rate-controlling factor is external diffusion to the surface of the absorbent. G. D. S.

ZABEZHINSKIY, J. V.

PA-26T60

USSR/Physics

Absorption

Mathematics - Applied

Jan 1947

"Absorption of Gas from an Air Current by Granular Material, Part II," A. Tikhonov, A. Schuchowitzky, J. Zabzhinskiy, Karpov Institute of Physical Chemistry, Moscow, 16 pp

"Acta Physicochimica URSS" Vol XXII, No 1

A solution is given to the simple linear differential equations describing gas absorption. Experimental data is compared with theoretical results, in tabular and graphical form.

PA 26T60

BS

ZABEZHINSKIX, YA. L.

PA 47/49T102

USSR/Physics

Absorption

Feb 49

"Absorption of Gas From an Air Current by a Layer of  
Granular Material III," Ya. L. Zabeshinskij, A.  
A. Zhukhovitskij, A. N. Tikhonov, 10 pp

"Zhur Fiz Khim" Vol XXXIV, No 2

Conducted experiments with activated carbon using  
diethyl ether as a sorbate to verify theoretical  
results of previous reports on certain dependen-  
cies of concentration C at a distance L upon the  
time theta for various types of isotherms. Sub-  
mitted 26 Feb 47.

47/49T102

ZABEZHINSKIY, Ya., doktor khimicheskikh nauk; RATINOV, V., starshiy nauchnyy sotrudnik, kandidat khimicheskikh nauk.

Study of the properties of gypsum; extending its uses. Stroi.mat., Izdel.1 konstr. 2 no.1:28-29 Ja '56. (MLR 9:5)

1. Zaveduyushchiy laboratoriye gipsovykh izdeliy VNIIZhelezbetona (for Zabekhinsky)

(Gypsum)

1.2000

All-Union Sci. Res. Inst for Reinforced Concrete  
Products

RATJIKOV, V.N.; ZARZHEINSKII, Ya.L.; ROZENBERG, T.I.

Study of the solidification mechanism of gypsum binding materials with admixtures. Dokl. AN SSSR 109 no.5:979-981 Ag. 1956.

1. Vsesoyuznyy gosudarstvennyy nauchno-issledovatel'skiy institut zhelezobetonnykh izdeliy i perednykh materialov, Predstavлено akademikom P.A. Redindierom.

(Gypsum)

ZABGORODNIY, S.V.; SIDEL'NIKOVA, V.I.

Alkylation of diphenyl by pseudobutylene in the presence of  $\text{BF}_3\text{H}_3\text{PO}_4$ . Dokl. AN SSSR 118 no.1:96-98 Ja-F '58. (MIRA 11:3)

1. Voronezhskiy gosudarstvennyy universitet. Predstavleno akademikom  
A.V.Topchiyevym.  
(Alkylation) (Biphenyl)

BRATOS, Zygmunt; ZABIAK, Franciszek (Warszawa)

Problem of using gypsum in the construction industry.  
Przegl budowl i bud mieszk 35 no.10:542-544 01'63.

ZABIAK, Franciszek (Warsaw)

Role and importance of internal supervision in construction enterprises. Przegl budowl i bud mieszk 27 [i.e. 37] no.3: 165-168 Mr '65.

POLAND

ZABICKA, Jadwiga; Planning-Scheduling Section (Dzial Metodyczno-Organizacyjny) and Department of Epidemiology (Zaklad Epidemiologii) of State Hygiene Institute (Panstwowy Zaklad Higieny,) [Warsaw]

"Epidemiology of Mumps in Poland in 1961."

Warsaw, Przeglad Epidemiologiczny, Vol 19, No 4, 1965; pp 445-449.

Abstract [English summary modified]: In 1961, mumps was the third most frequent infectious disease with 69057 cases reported, or a morbidity of 232 per 100,000 inhabitants; right behind influenza (1952) and measles (461.) Data on ages, sex, season, location. Diagram, graph, 5 Tables.

1/1

ZABICA, Tonko

Split District in the general outlook and realizations of the  
Yugoslav tourist trade. Geogr hor 9 no.3:39-40 '63.

Tourist news. 57-59

SMIGIELSKI, Jozef (Gdansk); ZABICKI, Andrzej (Gdansk); DUDZISZ, Jerzy (Gdansk)

Results of experimental studies on the reaction of turbine blade  
cascades with a velocity exceeding that of sound. Inst masz przep  
PAN no.13:19-36 '63.

ZABICKA, Z.; DOSTAL, K.; SOVJAK, J.

"Wet method for suction and removal of dust in foundries. p. 240"

SLEVARENSTVI. (Ministerstvo tezkeho strojirenstvi a Ceskoslovenska vedecka technicka spolecnost pro hutnictvi a slevarenstvi) Praha, Czechoslovakia, Vol. 3, No. 8 Aug. 1955.

Monthly List of East European Accessions (EEAI), LC, Vol. 8, No. 6 June 1959  
Uncle

COUNTRY	: POLAND	H
CATEGORY	: Chemical Technology. Chemical Products and Their Applications. Ceramics. Glass. Binding*	
ABS. JOUR.	: RZKhim., No. 23 1959, No. 82958	
AUTHOR	: Zaboklicki, W.	
INST.	: -	
TITLE	: Study of Hydrocyclones in the Enrichment of Indigenous Kaolins	
ORIG. PUB.	: Szklo i ceramika, 1959, 10, NO 3, 80-82	
ABSTRACT	: A detailed description of commercial experiments performed on the wet enrichment of Bel'slevetzkiy (mined at "Mariya", Vrotslavskiy district, PDR) with the use of hydrocyclones (HC), operating at the porcelain factory, imeni Revolyutsiya 1905 in Vrotslavsk. The enriched kaolin fully met the required specifications and conformed with technical conditions for quality and was found suitable for the ceramic and paper industries. The	
<p style="text-align: center;">*Materials. Concrete.</p>		
CARD:	1/2	

H - 45

ZARIAK, F.; BRATOS, Z.

Is it necessary to import? p.42

SZKLO I CERAMIKA. (Centralne Zarządy Przemysłu Szklarskiego i Ceramicznego  
oraz Stowarzyszenie Naukowo-Techniczne Inżynierów i Techników Przemysłu Chemicznego)  
Warszawa, Poland. Vol.10, no.2, Feb.1959

Monthly List of East European Accessions Index, (EEAI) Lj, Vol.6, no.6  
June 1959

Uncl.

BRZOOZOWSKI, Wojciech (Gdansk); SMIGIELSKI, Jozef (Gdansk); ZABICKI, Andrzej  
(Gdansk).

High-speed wind tunnel studies on the cascades of TP2 and Alfa  
impulse type turbine profiles. Inst. masz. przep. PAN no.5:3-59 '61.

ZABICKI, S.

"Workers' Inventiveness in the Field of Industrial Safety", P. L. 7.  
(CHEMIK, Vol. 6, No. 5, May 1953, Katowice, Poland)

SC: Monthly List of East European Accessions, (EEAL), LC, Vol. 4,  
No. 1, Jan. 1955, Uncl.

ZABICKI, S.

ZABICKI, S.

"Popularizing Technical Improvements", P. 149. (CHEMIK, Vol. 6, No. 5, May 1953, Katowice, Poland)

SO: Monthly List of East European Accessions, (EEL), LG, Vol. 4, No. 1, Jan. 1955, Uncl.

ZABICKI, S.

ZABICKI, S.

"Result of the Contest in Industrial Safety", P. 140. (CHEMIK, Vol. 6, No. 5, May 1953, Katowice, Poland)

SO: Monthly List of East European Accessions, (EFAL), IC, Vol. 4, No. 1, Jan. 1955, Uncl.

ZABICKI, S.

Rhp w przemyśle barwnikow i półproduktów (Work Safety and hygiene in the dyestuff industry), by S. Zabicki. Reported in New Books, (Nove Kaizaki), No. 6, March 15, 1956.

POTAPOW, Jerzym mgr inz.; RADOMSKI, Stanislaw, mgr inz.; ZABICKI, Stefan, inz.

Foam fire fighting installation on a B-74 type tanker.  
Bud okretowe Warszawa 8 no.7:222-224 J1 '63.

1. Biuro Konstrukcyjne Stocznia im. Komuny Paryskiej, Gdynia.

ZABICKI, Zbigniew

Stefan Zolkiewski. Nauka polska 11 no.2:63-72 Mr-Ap '63.

1. Instytut Badan Literackich, Polska Akademia Nauk, Warszawa.

"APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001963320002-5

ZABIDAROV, V.I., inzh.; MOTOVILOV, V.V., kand.tekhn.nauk [deceased]

Simple remote signaling system. Energetik no.9:25-28 8 '64.  
(MIRA 17:10)

APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001963320002-5"

MOTOVILOV, V.V., kand. tekhn. nauk, dotsent [deceased]; ZABIDAROV, V.I.,  
fnzh.

Remote signaling system for industrial enterprises. Izv. vys.  
ucheb.-zav.; energ. 7 no.11:107-111 N. '64. (MIRA-1881)

1. Kuybyshevskiy politekhnicheskiy institut imeni V.V. Kuybysheva.  
Predstavlena kafedroy elektricheskikh stantsiy.

21(7)  
AUTHORS:Sov/89-7-3-16/29  
Sakharov, V. N., Kolesnikov-Svinarev, V. I., Mazarenko, V. A.,  
Zabidarov, Ye. I.

TITLE:

The Angular Distribution of the Radiation of Au<sup>198</sup> Scattered  
in Air Above Ground

PERIODICAL:

Atomnaya energiya, 1959, Vol 7, Nr 3, pp 266-267 (USSR)

ABSTRACT:

From a ~ 10,000 c Au<sup>198</sup> -source, which was located 1.5 m and 2.5 m above the ground, the total intensity of radiation in distances of up to 600 m from the source as well as the angular distribution of radiation in distances of 150, 250 and 400 mm from the source was measured. The total intensity was measured by means of a Geiger counter described in reference 1, in which the multiple scattered  $\gamma$ -quanta with energies of between 120 and 410 kev were recorded with the same sensitivity. Radiation with energies of between 60 and 120 kev were measured by means of a somewhat more sensitive counter.  $\gamma$ -quanta with energies below 50 kev were not recorded. Angular distribution was measured by means of a detector consisting of 4 counters connected in series, which was placed behind a thick lead disk (diameter 21 cm) in such a manner that the centers of this disk and of the detector were in one line with the center of the source. The following measuring results are graphically

Card 1/2

The Angular Distribution of the Radiation of Au <sup>198</sup> Scattered in Air Above  
Ground

given: Dependence of the absorption coefficient and of the intensity of the non-scattered radiation on the distance between the source and the detector. Angular distribution of the scattered radiation. By placing source and detector near the ground, the radiation intensity at large distances becomes about twice as small as in homogeneous air. If the distance between source and the ground is increased, this difference becomes smaller and attains only the 1.5-fold and a height of about 25 m at the same distances as before. This is in agreement with the predictions made by reference 4. With respect to angular distribution it may be said that, from distances of 150 m onward, it practically undergoes no further change. The results obtained may be used in order more easily to calculate  $\gamma$ -shields. The problem was raised by O. I. Leypunskiy. V. A. Rogachkov, V. A. Shabashov and V. N. Rodionov assisted in working with the strong  $\gamma$ -preparation. There are 4 figures and 4 Soviet references.

SUBMITTED: February 18, 1959

Card 2/2

2(5)

AUTHORS: Sakharov, V. N., Kolesnikov-Svinarev, V. I., SOV/20-124-2-20/71  
Nazarenko, V. A., Zabidarev, Ye. I.

TITLE: The Areal Distribution of Earth Ejected by Subterranean Explosions (Raspredeleniye na mestnosti grunta, vybrasyvayemogo pri podzemnykh vzryvakh)

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 124, Nr 2, pp 314-317  
(USSR)

ABSTRACT: The Institut khimicheskoy fiziki AN SSSR (Institute for Chemical Physics, AS USSR) collected experimental material concerning the distance of ejection of various portions of earth ejected by an explosion. The material is in many respects of some interest. When carrying out such experiments, it is necessary first to divide the area of ground before the explosion takes place within range of the crater to be formed into sections, and after the explosion the manner in which the fragments of earth are distributed over the said area must be determined. Various parts of the area were marked by means of radioactive indicators. Before the explosion 50-60 ampoules containing 1 millicurie Sb<sup>124</sup> were introduced into the soil

Card 1/3

The Areal Distribution of Earth  
Ejected by Subterranean Explosions

SOV/20-124-2-20/1

through narrow cracks. 20 of such explosions were carried out in this manner with from 10 kg to 10 t ammonite Nr 6 at various depths both in loess and in loam. Further, 1000 tons of ammonite Nr 6 were exploded in a depth of 40 m. The characteristic results given by 2 diagrams permit the following conclusions to be drawn: 1) The direction into which each particle of earth is ejected leads, when traced back in the opposite direction, through the center of the explosion. The direction in which that part of the ground which is located immediately above the charge is ejected is indefinite. 2) The distance covered by each ejected part of the earth is determined by its position with respect to the charge and varies, with conditions otherwise being unchanged, within the margin of  $\pm 30\%$ . 3) The dependence of the distance of flight from the position of the respective part of the ground before the explosion is shown by a nomogram. The smaller the angle between the radius and the axis of the crater, the farther will the earth be thrown. This dependence is commented upon in detail by the authors. These regularities are qualitatively the same with all explosions of charges of different strength. The maximum distance covered by the ejected earth increases only

Card 2/3

The Areal Distribution of Earth  
Ejected by Subterranean Explosions

SOV/20-124-2-20/71

slightly with an increase of the charge. With conditions otherwise remaining unchanged this distance decreases with an increase of the depth  $w$  of the charge at the rate of  $1/w^4$ . All this holds for explosions in loess, and for powerful explosions in loam, but not for weak explosions (10-100 kg) in solid loams. In the latter case no permanent regularities were found. Finally, the authors thank M. A. Sadovskiy, Corresponding Member, AS USSR, for bringing up the problem, and V. N. Rodionov for his collaboration in organizing the above described work as well as for discussing the results. V. A. Rogachkov and V. A. Shabashev are gratefully mentioned as having rendered practical assistance.

ASSOCIATION: Institut khimicheskoy fiziki Akademii nauk SSSR (Institute for Chemical Physics of the Academy of Sciences, USSR)

PRESENTED: September 18, 1958, by V. N. Kondrat'yev, Academician

SUBMITTED: September 15, 1958

Card 3/3

112049-66

EWI(m)/EPF(n)-2/EMP(t)/EMP(z)/EMP(b)/EWA(h) IJP(s) JD/HW

ACC NR: AP6002656

SOURCE CODE: UR/0386/65/002/012/0541/0541

AUTHOR: Drabkin, G. M.; Zabidarov, Ye. I.; Kasman, Ya. A.; Qkorolov, A. I.

ORG: Physico-technical Institute im. A. F. Ioffe, Academy of Sciences SSSR (Fiziko-technicheskiy institut Akademii nauk SSSR)

TITLE: Critical scattering of polarized neutrons in nickel

SOURCE: Zhurnal eksperimental'noi i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniya, v. 2, no. 12, 1965, 541-544

TOPIC TAGS: nickel, neutron scattering, small angle scattering, phase transition, Curie point, neutron polarization

ABSTRACT: A study of the critical small-angle scattering of neutrons is a very effective means of investigating phase transitions. To obtain more complete information on space-time spin correlation motions, which are responsible for the dynamics of the phase transitions, the authors investigated the critical scattering of polarized neutrons. They present in this article the results of the first stage of this research. The measurements were made with the aid of a previously described installation (G. M. Drabkin et al., ZhETF v. 47, 2316, 1964). A single-crystal nickel sample was placed in a ~10 oe magnetic field. The sample temperature was kept accurate to  $\pm 0.07^\circ$ . The beam of the incident neutrons is character-

Card 1/2

L 12049-66

ACC NR: AP6002656

ized by the following parameters: wavelength  $\sim 5.1 \text{ \AA}$ , polarization after reflection from the analyzer 80%, horizontal divergence  $\pm 1.5 \text{ min}$ , vertical  $\pm 10 \text{ min}$ . The experiments yielded the polarizations of the scattered neutrons passing through the sample and of the neutrons scattered through 10.2 minutes of angle. The Curie point was determined from the maximum scattering cross section. Near the Curie point the behavior of the polarization of the transmitted neutron beam is connected with the development of magnetization fluctuations. The magnetic field of these fluctuations give rise to non-coherent precession of the spins of the neutrons passing through the sample. This precession is just the cause of the depolarization. The polarization of neutrons scattered through 10.2 minutes is analyzed in detail. It is concluded that the neutron scattering is quasielastic near the phase transition point, and it is noted that a direct determination of such a change in the scattered-neutron energy is beyond the capabilities of modern experimental techniques. Authors are grateful to S. V. Maleyev for valuable advice and to D. M. SS Kaminker for interest in the work and a discussion of the results. Orig. art. has: 2 figures and 1 formula.

SUB CODE: 20/ SUBM DATE: 29Oct65/ ORIG REF: 002/ OTH RIF: 004

CC  
Cord 2/2

ZADIKYAN, A.A.

BENEGOVSKIY, Vladimir Iosifovich; GUDIMA, Nikolay Vasil'yevich; VANYUKOV, V.A., professor doktor, zasluzhennyy deyatel' nauki i tekhniki, rezensent; VANYUKOV, A.V., dotsent, kandidat tekhnicheskikh nauk, rezensent; L'VICHKOV, G.Y., inzhener, rezensent; ZADIKYAN, A.A., inzhener, rezensent; RESHETNIKOV, F.G., redaktor; ARKHANGEL'SKAYA, M.S., redaktor izdatel'stva; ATTOPOVICH, M.K., tekhnicheskiy redaktor

[Nickel metallurgy; a textbook for schools and courses for specialists]

Metallurgija nikelia; uchebnoe posobie dlia shkol i kursov masterov.

Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi

metallurgii, 1956. 355 p.

(ILRA 9:10)

(Nickel—Metallurgy)

ZABIELA, P., jaun. mokslo bendr.

Serotonin. Sveik. apsaug. 8 no.1831-35 Ja'63.

1. Kauno Valst. medicinos instituto Centrine mokslinio tyrimo laboratorija. Rektorius - prof. Z.Januskevicius.

SNIPAS, P., med. m. kand.; PAULIAUSKAS, S.; ZABIELA, P.

On the problem of patient-physician relations. Sveik. apieaug.  
8 no. 5:43-46 '63.

1. Kauno Valst. medicinos instituto hospitalines terapijos  
katedra (vedėjas - prof. Z. Januskevicius) ir Resp. Kauno  
klinine ligonine (vyr. gydytojas - doc. P. Jasinskas).  
(PHYSICIAN-PATIENT RELATIONS)  
(ETHICS, MEDICAL)

JANUSKEVICIUS, Z., prof. ZABIELA, P.

Arteriosclerosis as the cause of death according to autopsy  
data in Vilnius and Kaunas. Sveik. apsaug. 9 no.23-6 1964.

1. Kauno Valst. medicinos instituto Centrine mokslinio tyrimo  
laboratorija. Rektorius: prof. Z.Januskevicius.

\*

KOZLOWSKI, Jan; ZABELLO, Eugeniusz

A case of Reiter's disease. Przegl. derm., Warsz. 46 no. 6 1559-570  
N-D '59.

1. Z Zakladu Dermatologii i Wenerologii Studium Doskonalenia  
Lekarzy w Bydgoszczy. Kierownik: dr. J. Koslowski.  
(REITER'S DISEASE case report)

DOERFFER, Jerzy, prof. dr inz.; BURAU, Herman, mgr; ZABIELLO, Edmund,  
mgr inz.; STOLAREK, Piotr; MURZYNSKI, Konrad, mgr inz.;  
MADEJ, Jan

Twenty years at the seaside and on the sea. Przegl techn  
85 no.26:6,7 28 Je'64.

1. Chairman of the Voivodeship Contacts Committee, Central Technical Organization, Gdansk (for Doerffer).
2. Chief Executive, Polish Ocean Lines, Gdynia (for Bureau).
3. Chief Executive, Komuna Paryska Shipyards, Gdynia (for Zabiello).
4. Chairman, Gdansk Voivodeship People's Council (Stolarek).
5. Director, Gdansk Association of the Building Industry (for Murzynski).
6. Secretary of the Gdansk Voivodeship Committee of the Trade-Unions. (for Madej).

ZABIELSKA, Joanna; MALDYK, Henryka

Results of liver function tests in patients with rheumatoid arthritis. *Reumatologia (Warsz)* 3 no.1:63-67 '65.

1. Z II Oddzialu Instytutu Reumatologicznego w Warszawie.  
(Kierownik: dr. med. W. Bruhl; Dyrektor Instytutu: dr. med. W. Bruhl).

ZABIELSKI, B.

"A forest protection program as part of the management plan."

p.55 (Sylwan, Vol 102, no. 9, Sept 1958, Warsaw, Poland)

Monthly Index of East European Accessions (AAEI) LC, Vol 9, Sept 58

ZABIELSKI, Kazimierz

Problem of amending chapters 32 and 33 of the Universal Decimal  
Classification. Akt probi inf dok 7 no.3:6-13 Ky-Ja '62.

REICHER, Eleonora, Prof. Dr.; ZABIELSKA, J., lek.

Cutaneous dye tests in rheumatism. Postepy reumat. no. 166-78 1954.

1. Z Państwowego Instytutu Reumatologicznego Dyrektor prof. dr E. Reicher.

(RHEUMATISM, therapy,  
ACTH & cortisone, eff. on Evans blue & methylene blue skin  
tests)

(ACTH, therapeutic use,  
rheum., eff. on Evans blue & methylene blue skin tests)

(CORTISONE, therapeutic use,  
rheum., eff. on Evans blue & methylene blue skin tests)

(METHYLENE BLUE,  
skin test in rheum., eff. of ACTH & cortisone)

(DYES,  
Evans blue skin test in rheum., eff. of ACTH & cortisone)

(SKIN, in various diseases,  
rheum., Evans blue & methylene blue tests, eff. of  
ACTH & cortisone)

ZABIEROWSKI, M.

Gospodarka Zbozowa - Vol. 6, no. 5, May 1955.

Campaign of grain purchasing is approaching. p. 1.

Consignor must have right of taking protective tests. p. 5.

SO: Monthly list of East European Accessions, (EEAL), LC, Vol. 4, No. 9, Sept. 1955  
(Incl.)

ZABIEROWSKI, Wladyslaw (Lengyelorszag)

Society of Polish Textile Specialists. Magy textil 15 no.5/6:  
194-196 My-Jo '63.

BRZEZINSKA, Elenyna; ZABIELSKA, Joanna

Result of ambulatory therapy in rheumatism of soft tissues. Reumatologia Polska no. 3:45-48 '60.

1. Z Instytutu Reumatologicznego w Warszawie. Dyrektor: prof. dr med.

E. Reicher

(RHEUMATISM ther)  
(FIBROSITES ther)

ZABIELSKI, Boleslaw

Influence of intensive clearing on the growth increase  
of the surface trunk and the mass of wood in fir tree  
stands. Roczniki wyz szkola roł Poznan 14 209-228 '63.

Average growth increase of the wood mass as a basis of  
computing the current growth in forest planning. Ibid., 229-232.

1. Department of Forest Planning, College of Agriculture,  
Poznan.

ZABIELSKI, Boleslaw; MAGNUSKI, Konrad; WAZYNSKI, Bohdan; ZOLCIAK,  
Edward

Development analysis of oak regeneration in a pine stand  
by using the gap cutting method. Roczniki wyz szkola rol  
Poznan 14 233-247 '63.

1. Department of Forest Planning, College of Agriculture,  
Poznan.

ZABIELSKI, Boleslaw; MAGNUSKI, Konrad; WAZYNSKI, Bohdan; ZOLCIAK, Edward

Forest stands of Babia Gora National Park and their natural conditions. Prace nauk roln 1 lata 17 nr.2:307-354 '64.

Prospective premises for a conversion of the forest stands of Babia Gora National Park. Ibid.:355-373

1. Department of Forest Planning, Higher School of Agriculture, Poznan.

MROCZKIEWICZ, Leon; ZABIELSKI, Stanislaw

Observations made on a poplar plantation on the ex-  
periment forest farm Zielonka. Roczniki wyz szkola rol  
Poznan 14 109-118 '63.

1. Department of Specific Forest Cultivation, College  
of Agriculture, Poznan.

KRYSTER, Jan, mgr inz.; ZABIELSKI, Jerzy, mgr inz.

Heating, water supply, and sewerage equipment in bus and street car terminal stations. Gaz woda techn sanit 37 no.10:330-332 O '63.

1. Stolica Design Office of Communal Constructions, Warsaw.

ZABIEROWSKI, Wladyslaw, mgr.

Quarterly conferences of the local branch chairmen of the Association of Engineers and Technicians of the Textile Industry. *Przegl techn* no.30:14. Jl 162.

1. Przewodniczacy Glownej Komisji Oddzialow i Kol Zakladowych, Stowarzyszenia Inzynierow i Technikow Przemyslu "Mokieniowego", Warszawa.

ISAYEV, P.S.; KONDRATYUK, I.T.; ZABIGAYLO, V.Ye.

Gas manifestation in the Pavlograd-Petropavlovka area of the  
Donets Basin, Izv.vys.ucheb.zav.; geol, i razv, 6 no.10:68-79  
0 '63. (MIRA 18:4)

1. Dnepropetrovskiy gornyy institut im. Artema.

JANKOVIC, M.M.; MISIC, V.; POPOVIC, R.; DANON, J.; RADMI, S.; JOVANOVIC, B.;  
ZABIJAKIN, V.; MICEVSKI, K.; MARINOVIC, R.Z.; DIKLIC, N.; NIKOLIC, V.;  
PAVLOVIC, Z.; TATIC, B.; ELECIC, V.; STJEPANOVIC, Lj.; CROVIC, M.

Review of periodicals; botany. Bul sc Youg 9 no.4/5:139-140  
Ag-0 '64.

ZABIK, W.

Corrosion in boiler equipment, p. 195.

PRZEGŁAD MECHANICZNY. (Stowarzyszenie Inżynierów i Techników Mechaników Polskich)

Warszawa, Poland

Vol. 18, no. 7, Apr. 1959.

Monthly List of East European Accessions (EEAI) 16, Vol. 8, no. 7, July 1959

Uncl.

ZABIK, Wladyslaw

Stress corrosion of low-carbon steel in the mist of an ammonium nitrate solution; metallography of corrosion cracks.  
Mechanika Gliwice no. 19: 1-9 '63.

ZABIK, Wladyslaw, dr inz.

Phase strain hardening and its effect in the grain growth in  
low carbon steel. - Przegl. mech. 22 no.2:44-48 25 J '63.

1. Politechnika Slaska, Gliwice.

ZABIK WŁADYSŁAW

Poland /Chemical Technology. Chemical Products  
and Their Application  
Corrosion. Protection from Corrosion.

H-4

Abs Jour: Referat Zhur - Khimiya, No 1, 1958, 1592

Author : Zabik Wladyslaw

Title : Hydrogen Corrosion of Steel and Procedures for Its  
Prevention (Hydrogen Brittleness of Steel).

Orig Pub: Przegl. mech., 1957, 16, No 2, 58-64

Abstract: Consideration of the processes of adsorption of gases at the surface of the metal and of the effects thereon of a number of factors (temperature, composition of the gaseous medium, condition of the metal surface, different activity of atoms of the metal on projections and recesses of the surface, etc.). It is noted that diffusion (D) of gases takes place in a discontinuous manner and

Card 1/5

Poland /Chemical Technology. Chemical Products  
and Their Application  
Corrosion. Protection from Corrosion.

H-4

Abs Jour: Referat Zhur - Khimiya, No 1, 1958, 1592

is a bilateral process. On gas corrosion, films 0.04-0.5  $\mu$  thick are formed on Fe, Cu, Al, Mg and other metals. The nature of the structure, the density and adhesion of these films determine the corrosion stability of the metal. Hydrogen corrosion (HC) takes place with a D of H into the metal. Under specific conditions atomic H can diffuse throughout the entire body of the metal. D takes place along the boundaries of the crystals and occurs most readily along sliding surfaces of crystals and at the location of "holes" in the lattice of the metal. It is stated that among all the factors of the ambient medium it is the temperature of the medium that has the

Card 2/5

Poland /Chemical Technology, Chemical Products  
and Their Application  
Corrosion, Protection from Corrosion.

H-4

Abs Jour: Referat Zhur - Khimiya, No 1, 1958, 1592

greatest effect on D of H and HC. Examples of  
HC during acid pickling of Fe, are considered.  
The effect of the composition of the scale on  
the rate of evolution of H is noted, as well as  
the effect of the composition of the metal on  
its becoming brittle. Steel containing 0.85% C  
was found to be rendered most brittle. Data  
are presented, concerning a study of the effect  
of temperature and pressure, in processes of  
ammonia synthesis, on HC of steel containing  
0.76% C, and of the effect of the C content of  
steel on the rate of decomposition of cementite.  
It is pointed out that the most specific method

Card 3/5

Poland /Chemical Technology. Chemical Products  
and Their Application  
Corrosion, Protection from Corrosion.

Abs Jour: Referat Zhur - Khimiya, No 1, 1958, 1592

of determining the effect of hydrogen on steel  
is the determination of the resilience of the  
steel. One of the methods of reducing the  
danger of the occurrence of HC is the use of  
steel having a low content of C. Alloying of  
steel with Si, Cu and Ni does not increase its  
stability to HC; Mn, Mo and W have little ef-  
fect; whereas Cr, V, Ta, Nb and especially Ti  
decrease HC. It is necessary to take into  
account the fact that the amount of Cr in steel  
depends on the amount of C contained in it.  
Thus, with 0.11% C the Cr-content must not be  
less than 4.95%. For equipment used in ammonia  
synthesis it is recommended to use steel con-

Card 4/5

Poland /Chemical Technology. Chemical Products  
and Their Application  
Corrosion. Protection from Corrosion.

H-4

Abs Jour: Referat Zhur - Khimiya, No 1, 1958, 1592

taining not more than 0.15% C, 5-6.5% Cr, not  
more than 0.5% Si and not more than 0.5% Mg,  
0.45-0.60% Mo, 0.5% V and not more than 0.6%  
Ni. The desirability of incorporating Ti in  
the steel is noted specifically.

Card 5/5

ZABILKA, V.

SKATSLIK, F. [Skatslik, F.], inzhener (Chekhoslovakija); ZABILKA, V.,  
inzhener (Chekhoslovakija).

The RB-750 concrete paver. Mekh.trud.rab. 11 no.5:44-46 by '57.

(MERA 10:7)

(Pavements, Concrete) (Road machinery)

ZABINKOVA, N.N.

Translating the Latin names of plants into Russian; on the  
problem of Russian botanical nomenclature. Bot. zhur. 50  
no. 7:962-966 J1 '65. (MIRA 18:11)

1. Voyennoc-meditsinskaya akademiya imeni Kirova, Leningrad.

PAMPUCH, R.; ZABINSKA, T.

Industrial quality testing of plugs and kettle bricks by  
ultrasonic method. Epticanyag 14 no.6:229-234 Je '62.

1. Tuzalloanyagipari Kutato Intezet, Gliwice, Poland.

ZABINSKI, E.

"Survey of the inventiveness of workers in the Machine Institute in Krakow,"  
Mechanik, Warszawa, Vol 27, No 1, Jan. 1954, p. 40.

SO: Eastern European Accessions List, Vol 3, No 11, Nov 1954, L.C.

ZABINSKI, Jan, dr

Something, a little more than vitamins. Problemy 18  
no. 10: 692-695 '62.

ZABINSKI, J.

ZABINSKI, J.

How to increase the defensive properties of an organism, p. 10. (ZDROWIE, Warszawa, Vol. 6, no. 8, 1954.)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 6, Jan. 1955, Uncl.

ZABINSKI, Jan, dr

Solitude means death. Review of a motion picture. Problem 19 no. 3.  
201-204 '63.

ZABINSKI, J.

Lead poisoning, p. 11. (ZDROWIE, Warszawa, Vol. 6, no. 8, 1954.)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 6, Jan. 1955,  
Uncl.

ZABINSKI, J.

The use of cosmetics; health and beauty, p. 12. (ZDROWIE, Warszawa, Vol. 6, no. 8, 1954.)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 4, Jan. 1955, Uncl.

ZABINSKI, J.

When a mother has too little nourishment; advice to future mothers, p. 12. (ZDROWIE,  
Warszawa, Vol. 6, no. 8, 1954.)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 6, Jan. 1955,  
Uncl.

ZABINSKI, J.

Hygienic actualities; August, p. 12. (ZDROWIE, Warszawa, Vol. 6, no. 8, p. 12.  
(ZDROWIE, Warszawa, Vol. 6, no. 8, 1954.)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 6, Jan. 1955,  
Uncl.

ŽABINSKI, Jan, doktor.

Latimeria. Nauka i zhizn' 23 no.5:26-28 '56. (Klura 9:8)

1. Direktor Varshavskogo zooparka.  
(Latimeria)

1. ZABINSKI, JAN
2. USSR (600)
4. Bison, European - Poland
7. Work in the restoration of bison. Priroda 42, no. 3, 1953.

9. Monthly List of Russian Accessions, Library of Congress, May 1953. Unclassified.

ZABINSKI, Jan, dr

Zoological terminology. Problemy 19 no.9:578-581 '63.

NONIECZNA-MARCZVASKA, Barbara; SKOWRON-CENDFZAK, Anna; ZABINSKI, J.

Further investigations on parabiotic intoxication in white  
mice. *Folia biologica* 9, no. 2:131-134 '61.

1. Department of Experimental Zoology, Polish Academy of Sciences,  
Krakow and Department of Biology and Embriology, Medical Academy,  
Krakow. Head: S. Skowron, Ph. D.

\*

ZABINSKI, Jan, dr

Deathly fear. Problemy 18 no.3:173-176 '62.

KONIECZNA-MARCZINSKA, Barbara; PLONKA, Irena; SKOWRON-CENDRZAK, Anna;  
ZABINSKI, J.

Hematological and serological investigations in heteroparabiosis after  
preimmunisation of one of the parabionts. Folia biol. 8 no.1/2:83-87  
'60. (EEAI 10:4)

1. Department of Experimental Zoology, Polish Academy of Sciences,  
Krakow and Department of Biology and Embryology, Medical Academy,  
Krakow; head: Prof. Dr. S. Skowron.  
(PARABIOSIS)  
(BLOOD)

SKOWRON-CENDRZAK, Anna; ZABINSKI, J.

Further investigations on parabiotic intoxication in splenectomized  
mice. Folia biol 8 no.3:157-165 '60. (EEAI 10:6)

1. Department of Experimental Zoology, Polish Academy of Sciences,  
Krakow, Head: S. Skowron, Ph.D.  
(PARABIOSIS) (SPLENECTOMY)

ZABINSKI, Marian

Determining the minimum surface of sheet metal used for the construction of cylindrical tanks. Problemy projektu maszyn 10 no. 12:380-381 D '62.

1. Biprohut, Gliwice.

ZABINSKI, Marian, M.R. inc.

Work line calculations of continuous steel strip pickling in  
sulfuric acid. Hutnik 31 no.12:389-394 D '64.

COUNTRY	:	Poland	D
CATEGORY	:		
ABS. JOUR.	:	RZKhim., No. 22 1959, No. 73191	
AUTHOR	:	Kubisz, J. and Zabinski, W.	
INST.	:	Polish Academy of Sciences	
TITLE	:	The Jarosites from the Silesia-Crakow Zinc and Lead Ore Deposits	
ORIG. PUB.	:	Bull Acad Polon Sci, Ser Sci Chim, Geol et Geograph, 6, No 12, 793-797, LVI (1958)	
ABSTRACT	:	Mineralogic studies of the oxidation zones of Pb-Zn ore deposits as well as x-ray structure, thermal, and chemical analyses (4 samples) indicate that minerals with a chemical composition intermediate between that of plumbjarosite and carphosiderite are encountered along with typical plumbjarosites. The jarosite concentrations studied were formed in modern times on the walls of mines and underground excavations.	
		V. Kudryashova	

CARD: 1/1

76

ZABINSKI, W.

Note on grossular and hydrogrossular-like Vesuvianite in the  
calc-silicate rocks from Kletno, Lower Silesia. Bul geolog  
PAN 11 no. 4:223-229 '63.

1. Department of Mineralogy and Petrography, School of  
Mining and Metallurgy, Krakow. Presented by A. Bolewski.

STOCH, L.; ZABINSKI, W.

Some aspects of the thermal dissociation of minerals as  
studied by the DTA method. Bul geolog PAN 11 no.2:87-91 '64.

1. Department of Mineral Raw Materials and Department of  
Mineralogy and Petrography of the School of Mining and  
Metallurgy, Krakow. Presented by A. Boleski.

KUBISZ, J.; ZABINSKI, W.

The jarosites from the Silesia-Krakow zinc and lead ore deposits.  
(ERAI 9:6)  
Bul Ac Pol chim 6 no.12:793-797 '58.

1. Department of Mineralogy and Petrography, School of Mining and  
Metallurgy, Cracow. Presented by A.Bolewski.  
(Poland-- Jarosite) (Poland-- Zinc) (Poland-- Lead)

ZABINSKI, W.

Zincian dolomite from the Warynski Mine, Upper Silesia. Bul. Ac Pol  
chim 7 no.5:355-358 '59. (EHA 9:9)

1. Department of Mineralogy and Petrography, School of Mining and  
Metallurgy, Cracow. Presented by A.Bolewski.  
(Poland--Dolomite) (Poland--Zinc)

ZABINSKI, W.

D

COUNTRY : Poland

CATEGORY :

ABS. JOUR. : RZKhim., No. 20 1959, No. 71132

AUTHOR : Zabinski, W.

INST. : Polish Academy of Sciences

TITLE : Epsomite and Melanterite from Boleslaw Near Olkusz.

ORIG. PUB. : Bull. Acad. polon. sci. Ser. sci. chim. geol. et geogr., 1958, 6, No 11, 717-721, LII

ABSTRACT : Investigation of heptahydrates of the sulfates of Mg, Fe, and Zn, from old drifts of Pb-Zn-mines. Chemical analyses are given for 6 specimens of epsomite (I) and specimens of melanterite (II). Contents range, respectively (in %): MgO 8.11-16.18; 0.48-4.04; ZnO 0.16-12.52; 2.49-12.46; FeO 0.01-1.56; 11.19-22.64; MnO 0.005-0.23; 0.01-0.04; SO<sub>3</sub> 30.02-32.65; 28.36-29.55; H<sub>2</sub>O 47.64-51.29; 45.11-46.82; Al<sub>2</sub>O<sub>3</sub> < 0.1; < 0.2; CaO, Na<sub>2</sub>O and K<sub>2</sub>O < 0.01; < 0.03; Cd < 0.001; traces; Ni 0.002-0.0055; 0.0015-0.0028; Co < 0.001; < 0.001. I with a higher content of Zn (8.38-12.52%), called zinc-I, is an intermediate member of the continuous series I - goslarite, which was previously

CARD: 1/2

8